



December 7, 2009

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

**RE: GN Docket Nos. 09-47, 09-51, 09-137 and RM-11358**

Dear Ms. Dortch:

The Commission has been given the extraordinary task of encouraging competition, promoting advanced services, finding the most effective and efficient means of ensuring affordable broadband service, and maximizing the utilization of broadband infrastructure. As COMPTEL has repeatedly emphasized, last mile access facilities to customers remain bottlenecks in the incumbent local exchange carriers' ("LECs") networks and, as a result, these facilities must remain available to requesting telecommunications carriers at cost-based rates in order to facilitate competition in the provision of broadband services.<sup>1</sup> It is imperative that the Commission address this important issue in its forthcoming National Broadband Plan.

COMPTEL and individual competitors have proposed several means of ensuring that fiber and copper loop facilities are available to competitors on a going-forward basis. COMPTEL has repeatedly argued in the past that incumbent LEC fiber facilities should be made available to competitors at cost-based rates.<sup>2</sup> Moreover, numerous competitors have urged the Commission to adopt much-needed procedural and substantive rules to govern the circumstances in which incumbent LECs are permitted to retire copper loop facilities.<sup>3</sup> This letter complements

<sup>1</sup> Comments of COMPTEL, *In the Matter of a National Broadband Plan for Our Future*, GN Docket No. 09-51, pp. 14-15 (Jun. 8, 2009).

<sup>2</sup> *Id.* One COMPTEL member, Cbeyond, recently filed a petition seeking unbundled access to last-mile fiber and hybrid loop facilities pursuant to a pricing methodology other than TELRIC.

<sup>3</sup> See BridgeCom International, Inc. *et al*, Petition for Rulemaking and Clarification, RM-11358 (Jan. 18, 2007)("BridgeCom *et al* Petition"); XO Communications, LLC *et al*, Petition for Rulemaking, RM-11458 (Jan. 18, 2007)("XO *et al* Petition").

those requests by proposing rule changes, and pricing guidelines, that should apply to copper facilities an incumbent LEC is permitted to “retire” so that these facilities may be utilized by an entrant to the broadband market.

Accordingly, COMPTTEL hereby outlines and explains, for inclusion in the above-referenced proceedings, a proposal to ensure that “retired” copper is preserved and reusable for competitive broadband services. New technologies are adding tremendous value to the legacy copper loop network that today, with the addition of electronics and pair bonding techniques, has become a critical platform for broadband/advanced services. Given the ubiquity of copper, this should be tremendously good news for a country looking for ways to increase broadband penetration. COMPTTEL’s proposal speaks to each and every one of the Commission’s statutory responsibilities referenced above. In particular, it ensures maximum utilization of existing infrastructure viable for the effective and efficient provisioning of competitive broadband/advanced services. The ability to provide innovative broadband services over existing infrastructure reduces input costs to carriers, which, along with competition, leads to more affordable services for both residential and business consumers.

### **The Commission’s Current Rules Fail to Ensure for the Efficient and Effective Use of Existing Copper Facilities for the Provision of Broadband Services.**

The Commission, in a misguided effort to promote broadband deployment, significantly altered critical aspects of the unbundling legislation adopted by Congress in 1996, and as a consequence impeded the advancement of competitive broadband services in the United States.<sup>4</sup> Specifically, over the past decade the Commission has relieved incumbent LECs from the Section 251 obligation to offer fiber to the curb (“FTTC”) and fiber to the home (“FTTH”) loops on an unbundled basis (with the limited exception of a voice grade capacity in overbuild situations and high capacity TDM offerings such as DS1 and DS3s) and relieved incumbent LECs from the Section 251 obligation to offer the packetized functionality of hybrid loops on an unbundled basis.<sup>5</sup> The Commission also granted forbearance from enforcing the RBOCs’ 271

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<sup>4</sup> See The Berkman Center for Internet & Society at Harvard University, *Next Generation Connectivity: A review of broadband Internet transitions and policy from around the world*, p. 75 (October 2009 Draft) [“open access policies contributed to the success of many of the highest performers during the first broadband transition, and as a result are now at the core of future planning processes in Europe and Japan. Contrary to perceptions in the United States, there is extensive evidence to support the position, adopted almost universally by other advanced economies, that open access policies, where undertaken with serious regulatory engagement, contributed to broadband penetration, capacity and affordability in the first generation of broadband.”]

<sup>5</sup> *In the Matter of Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978 (2003)(“Triennial Review Order”); *In the*

obligations to offer certain broadband elements on an unbundled basis;<sup>6</sup> failed to act on a Verizon request for forbearance from the entirety of Title II and the *Computer Inquiry* requirements to its broadband services, resulting in a “deemed grant” of its request for relief;<sup>7</sup> and, subsequently, significantly relieved AT&T, Qwest and some other large incumbent LECs from dominant carrier and *Computer Inquiry* regulation of their non-TDM based packet-switched broadband services and non-TDM based optical broadband services.<sup>8</sup>

The Commission, unfortunately, failed to provide adequate protection for the future use of copper facilities - embedded facilities which can be combined with new technologies to enable carriers to efficiently bring broadband services to consumers. In particular, in overbuild situations the Commission gave the incumbent LECs the option to “retire” the copper loop.<sup>9</sup> In doing so, the Commission never clarified what, if any, obligations the incumbent LEC has with regard to these retired loops.

Moreover, as discussed in the Bridgecom *et al* Petition and XO *et al* Petition, the Commission imposes limited restrictions and provides no means for any substantive challenge or review of the incumbent LEC’s retirement of copper facilities in overbuild situations.<sup>10</sup> The minimal procedural rules that do exist only provide for limited objections by a provider currently interconnecting with the incumbent LEC’s network and, then, generally only provide for

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*Matter of Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338, Order on Reconsideration, 19 FCC Rcd 20293 (2004).

<sup>6</sup> *Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. §160(c)*; *SBC Communications, Inc.’s Petition for Forbearance Under 47 U.S.C. §160(c)*; *Qwest Communications International Inc Petition for Forbearance under 47 U.S.C. §160(c)*; *BellSouth Telecommunications, Inc. Petition for Forbearance Under 47 U.S.C. §160(c)*, WC Docket No. 01-338, Memorandum Opinion and Order, 19 FCC Rcd 21496 (2004).

<sup>7</sup> FCC News Release, *Verizon Telephone Companies Petition for Forbearance From Title II and Computer Inquiry Rules With Respect To Their Broadband Services Is Granted By Operation of Law*, WC Docket No. 04-440 (rel. Mar. 20, 2006).

<sup>8</sup> *E.g., Petition of AT&T, Inc. for Forbearance under 47 U.S.C. §160(c) from Title II and Computer Inquiry Rules With Respect to Its Broadband Services*, WC Docket No. 06-125, Memorandum Opinion and Order, 22 FCC Rcd 18705 (2007); *Qwest Petition for Forbearance Under 47 U.S.C. §160(c) from Title II and Computer Inquiry Rules With Respect to Its Broadband Services*, WC Docket No. 06-125, Memorandum Opinion and Order, FCC 08-168 (rel. Aug. 5, 2008).

<sup>9</sup> 47 CFR § 51.319(a)(3)(iv).

<sup>10</sup> *Supra*, n. 3.

additional time for the competitor to get off the facilities.<sup>11</sup> Thus, the rules provide for no protection of copper facilities competitive LECs may want to use in the future and nearly no protection for copper facilities competitive LECs are using at the time of the proposed retirement. Finally, the alternative to the copper loops provided for by the Commission's rules – a 64 kbps FTTH/FTTC<sup>12</sup> and TDM-based DS1s and DS3s<sup>13</sup> – are insufficient to provide services expected not only by today's business customers but by today's residential customers as well. Few customers today want only simple, single-line, voice service, yet that is about all a competitive LEC can provide using a 64 kbps channel. In short, the incumbent LECs are permitted under the current rules to preclude the deployment of copper-based broadband services in overbuild situations through the retirement of the copper loop (in whole or in part) even where the copper facilities remain and could be utilized for the provision of competitive broadband services.

### **Copper Facilities = Competitive Broadband Services.**

Competitors have demonstrated that copper is a viable medium for bringing exceptional broadband services to consumers. COMPTEL member companies deploy broadband equipment in the incumbent LEC central offices and connect to end-users via leased unbundled copper loops. Using the copper loop plant, these carriers provide array of applications and services such as Internet service, VoIP, voice, e-mail, web hosting, and value added services (e.g. internet security services).<sup>14</sup> Ethernet over Copper ("EoC"), in particular, has shown great potential to play a significant part in transformation of the marketplace. EoC enables voice and data traffic to be initiated, transported and delivered in IP (Internet Protocol) format utilizing packet switched networks at ever increasing transmission speeds.

Current technology enables substantially more bandwidth over copper than when the Commission adopted its copper retirement rules. Indeed, it was only two years ago that competitive LECs reported that copper is capable of supporting services with transmission

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<sup>11</sup> 46 CFR §51.333(c). Moreover, the Commission excluded the copper feeder plant from the limited protection it did provide to copper loops and subloops. *Triennial Review Order*, n. 824. If the copper feeder plant is unavailable for unbundled access, the practical difficulty of obtaining access to the remaining portion of the loop forecloses competitive access to the customer. *See BridgeCom et al Petition* at 12.

<sup>12</sup> *See* 47 CFR §51.319 (a)(3)(iii)(C).

<sup>13</sup> *See* 47 CFR §51.319 (a)(2)(ii).

<sup>14</sup> *See e.g.*, Initial testimony of Elizabeth Balvin, Covad Communications, Before the Public Service Commission of Maryland, Case No. 9123, pp. 3-4 (Jun. 2008); *see also* Initial Testimony of Aaron Bruneau, One Communications, Before the Public Service Commission of Maryland, Case No. 9123, pp. 5-6, ("Competitive carriers use the continuous copper loop from the central office to the customer premise ("home run copper loop") to provide an array of broadband services such as Ethernet over Copper, SIP, ADSL services...")(June 19, 2008).

speeds of 200 Mbps symmetric transmission on 500 meters of wire and 50 Mbps at 1.5 km.<sup>15</sup> Earlier this year Aktino, Inc. announced that its Ethernet-Over-Copper products will deliver up to 100Mbps on just 5 copper pairs (80 Mbps on four copper pairs)<sup>16</sup> and Ericsson announced that it has demonstrated 500 Mbps transmission rate over copper cabling, more than double the prediction two years ago, with plans to implement by the end of this year.<sup>17</sup> Moreover, a study by Stanford University and ASSIA Inc. found a copper line architecture called the CuPON architecture “allows a DSL 0.5-1 Gb/s data rate *per* customer and roughly 100 Gb/s of readily realizable total bandwidth for a typical 200-pair telephone company distribution area.”<sup>18</sup> These advancements are transforming services to business and residential markets. For example, Cavalier uses unbundled copper facilities to provide a triple-play of voice, broadband and IPTV services.<sup>19</sup>

### **The Commission Must Act Quickly to Preserve Copper Facilities.**

Pursuant to the American Recovery and Reinvestment Act, the Commission is tasked providing “an analysis of the most effective and efficient mechanisms for ensuring broadband access by all people of the United States [and] a detailed strategy for achieving affordability of such service and *maximum utilization of broadband infrastructure* and service by the public.”<sup>20</sup> In accordance with Section 706 of the Telecommunications Act of 1996, the Commission is required to promote the deployment of advanced telecommunications capability by utilizing

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<sup>15</sup> XO *et al* Petition, p. 14, *citing*, “Chapter 11-Dynamic Spectrum Management,” Prof. John M. Cioffi, pp. 42-43, available at <http://isl.stanford.edu/~cioffi/dsm>.

<sup>16</sup> Aktino Press Release, March 24, 2009, available at <http://www.aktino.com/documents/PDF/20090424%20Aktino%20Doubles%20Rate-Reach%20Performance.pdf>

<sup>17</sup> PCMag.com Staff, “Ericsson Demonstrates 500-Mbit/s DSL, PCMag.com,” March 17, 2009, available at <http://www.pcmag.com/article2/0,2817,2343307,00.asp>. *See also*, Geoff Duncan, “Game On: Ericsson Demonstrates 500 Mbps DSL,” Digital Trends, March 16, 2009, available at <http://www.digitaltrends.com/gadgets/game-on-ericsson-demonstrates-500-mbps-dsl/>

<sup>18</sup> John M. Cioffi, Sumanth Jagannathan, Mehdi Mohseni, and George Ginis, Stanford University and ASSIA, Inc., “CuPON: The Copper Alternative to PON 100 Gb/s DSL Networks,” IEEE Communications Magazine, June 2007 (emphasis deleted).

<sup>19</sup> *See* Letter from Patrick Donovan, Esq., Bingham McCutchen, to Marlene Dortch, Secretary, Federal Communications Commission, WC Docket No. 06-74 (filed Dec. 11, 2006) (“Cavalier Telephone and TV *ex parte* presentation”).

<sup>20</sup> American Recovery and Reinvestment Act, Pub.L.No. 111-5, Section 6001(k)(2)(A) and(B)(emphasis added).

“measures that promote competition in the local telecommunications market.”<sup>21</sup> Section 4(i) of the Communications Act gives the Commission broad authority to take actions necessary to implement its functions.<sup>22</sup>

The Commission needs to act expeditiously to preserve the existing copper and promote investment by competitors in broadband services. Verizon has announced its intent to pass 17 million homes with its FIOS FTTH by the end of 2010 and “AT&T plans to pass 30 million living units with its U-Verse service (a hybrid FTTN-DSL) by 2011.”<sup>23</sup> If they decide to “retire,” and thereby make their copper loops unavailable for unbundling everywhere they deploy fiber, competitors will be denied the ability to provide broadband services over these facilities in 50% and 60% of Verizon and AT&T’s footprints, respectively.<sup>24</sup> As discussed above, competitors are already using copper to provide broadband services such as Ethernet in some areas. But the threat of being stripped of their access to the copper, which is becoming more pertinent given the actual and planned increase in fiber deployment by the incumbents, detracts from competitors’ willingness to make the necessary investments in technologies to provide broadband.<sup>25</sup> As explained in the attached declaration of Joseph Gillan (“Gillan Declaration”), there are substantial sunk costs associated with deploying the technologies need to provision broadband services over copper loops.<sup>26</sup> The Commission’s rules need to be amended to provide carriers the confidence in their continued access to copper loops in order for those facilities to reach their full potential in the provision of broadband services.

### **Copper Loops Must Be Maintained in a Manner that Will Allow for Utilization by Competitive Broadband Providers**

Under the current rules, the incumbent LEC must maintain the existing copper loop connected to the particular customer premises after deploying FTTH/FTTC and provide nondiscriminatory access to that copper loop on an unbundled basis unless the incumbent LEC retires the copper loop.<sup>27</sup> The Commission’s rules should be amended to state that when an

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<sup>21</sup> 47 U.S.C. 157 nt.

<sup>22</sup> 47 U.S.C. 154 (i).

<sup>23</sup> Robert C. Atkinson & Ivy E. Schultz, “Broadband in America Where It Is and Where It Is Going,” Preliminary Report Prepared for the Staff of the FCC’s Omnibus Broadband Initiative, Columbia Institute for Tele-Information, p. 15, Nov. 11, 2009 (“Columbia Study”).

<sup>24</sup> *Columbia Study* at 26.

<sup>25</sup> This result is also contrary to the objectives proclaimed in the *Triennial Review Order* that seeks to facilitate competition and promote innovation by encouraging infrastructure investment tied to legacy copper loops. *Triennial Review Order* at ¶ 244 (2003).

<sup>26</sup> Gillan Declaration (Attachment A) at ¶ 11.

<sup>27</sup> 47 CFR §51.319 (a)(3)(iii)(A).

incumbent LEC decides to deploy fiber and no longer intends to use the existing copper plant (in whole or in part), regardless of whether or not the incumbent “retires” the loop (in whole or in part), the incumbent LEC may not (with limited exception) remove or dismantle the copper. In addition, all network facilities (this could include but is not limited to cable assignments, local loop cross connections, service access wire, drop/entrance facilities, and NID) necessary to preserve the electrical continuity to the customer premise (point of demarcation in a building) must be left connected and in place (with the association to a service address retained), and the copper loop (inclusive of network facilities) must be made available to competitive providers on an unbundled basis.

As explained in the attached Declaration of David J. Malfara and William E. Steenson of the ETC Group, LLC (“ETC Declaration”), there is generally no technical reason for removing the copper or otherwise disabling it for purposes of the incumbent LEC’s fiber deployment. Indeed, the historical practice of the incumbent LEC is to not recover buried copper and, with regard to aerial cable, a common practice is for the fiber cable to be double-lashed to an existing copper cable, resulting in “the copper cable remain[ing] indefinitely as a critical part of the infrastructure.”<sup>28</sup>

Moreover, as discussed in the ETC Declaration, there also is no technical reason for the routine removal or disconnection of the network components (e.g., cables, cross-connections, drops or NIDs.) Indeed, a common practice, referred to as a Disconnect-In-Place (“DIP”), was implemented by incumbents to avoid “truck rolls” when re-connecting switch services. Under the DIP process all network facilities (e.g. cable assignments, local loop cross connections, service access wire, drop/entrance facilities, and NID) necessary to preserve electrical continuity to the customer premise are left connected and in place and retains the association to the service address.<sup>29</sup> In other words, the service is disconnected but the facilities remain connected to the premise. While at least one incumbent seems to have adopted a practice of unnecessarily disconnecting the loop from the NID or removing the drop when installing fiber, such action has been found to be anticompetitive.<sup>30</sup>

This obligation will not pose a significant cost burden to the incumbent LEC. As explained in the ETC Declaration, there are virtually no routine activities associated with

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<sup>28</sup> ETC Declaration (Attachment B) at ¶¶ 34-38.

<sup>29</sup> See ETC Declaration at ¶41.

<sup>30</sup> Hearing Examiner, MD PSC Case No. 9123, at 23 [“I find that the evidence for the need to disconnect the copper from the NID is not strong enough to justify the added step and burden created in the process of migrating to a competitive LEC. If the copper is not disconnected, one less visit and one less delay in the switch to a competitive LEC will result. I therefore find that it is improper and *anti-competitive for Verizon to disconnect the copper from the NID* when a customer switches from Verizon telephone service over copper to service over fiber.”](emphasis added). In the case of loops that have not been retired, this action also violates FCC rule 319(a)(3)(iii)(A).

maintaining the outside plant for which the incumbent LEC would incur costs.<sup>31</sup> Maintaining the copper loop for reactivation, by and large, only requires that the incumbent LEC refrain from removing the copper and the network components. It is the removal of these facilities that would generate a cost to the incumbent LEC.<sup>32</sup> Reactivation costs, to the extent they exist at all, would consist of repairs (if needed) that, in most cases, are not costly with respect to technician-hours or materials.<sup>33</sup>

As stated above, the Commission should require the incumbents to provide unbundled access to their fiber facilities generally. Thus, even in the rare instances where the incumbent LEC is unable or would incur a substantial cost burden to reactivate the copper due to severe damage to the copper core of a cable or facilities relocations for road improvements and construction; the incumbent LEC has already removed the copper; or removal is necessary for fiber deployment, competitors would be provided access to the incumbents' fiber facilities under such rules. In these instances the incumbent LEC should be required to provide an EVPL (Ethernet Virtual Private Line) which supports the bandwidth characteristics of copper loops (single and bonded) and meets the specifications for such Ethernet Services Definitions as described by the Metropolitan Ethernet Forum,<sup>34</sup> and at a cost, such that the entrant would be indifferent to leasing the requisite capacity from the incumbent LEC compared to the cost to derive the same level of capacity on the copper that has been removed. As discussed in the Gillan Declaration, this should provide the incumbent LEC adequate compensation for the use of the fiber facilities.<sup>35</sup> As a policy matter, it will allow the incumbent LEC to remove/dismantle the copper when truly necessary, while providing some assurance that the motive to do so is not anticompetitive.

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<sup>31</sup> ETC Declaration at ¶¶ 23 and 29[“[M]ost activities considered “maintenance” activities are typically associated with a specific event...Consequently there are no plant-specific maintenance activities to keep idle-facilities in a condition to return to service (other than any repair associated with the events described above.)”]

<sup>32</sup> *Id* at ¶ 39 [“[T]he labor and construction costs of copper cable removal would, very likely, meet or exceed the original cost of deployment...This point is supported by the fact that ILECs, historically, have not removed unused copper cable...”]

<sup>33</sup> *Id* at ¶¶ 29-30.

<sup>34</sup> See ETC Declaration at ¶ 44 and n. 10 [“The MEF Technical Specification for Ethernet Service Definitions can be found at: [http://metroethernetforum.org/PDF\\_Documents/MEF6-1.pdf](http://metroethernetforum.org/PDF_Documents/MEF6-1.pdf) . The Metro Ethernet Forum (MEF) is a global industry alliance comprising more than 145 organizations including telecommunications service providers, cable operators, MSOs, network equipment, test vendors, labs and software manufacturers, semiconductors vendors and testing organizations. The MEF develops technical specifications and implementation agreements to promote interoperability and deployment of Carrier Ethernet worldwide. All RBOCs are members of the MEF.”]

<sup>35</sup> Gillan Declaration at ¶¶ 21-24.

## Pricing Standards for Recycled Copper

In addition to preserving the retired copper facilities for use by competitors, the Commission should adopt appropriate pricing rules that would compensate the incumbent LEC when copper loop facilities are provisioned to an entrant after a period of retirement.<sup>36</sup> As discussed in the Gillan Declaration, the existing UNE price would overprice recycled copper facilities (i.e., copper that was retired and is now being put back in use for the provision of service) because they are designed to reflect the cost to rebuild the network, not merely extend its useful life.<sup>37</sup> The Commission's existing TELRIC pricing rules were intended to provide entrants with appropriate incentive to replace incumbent LEC facilities with competitive facilities where it makes economic sense to do so by establishing a price equal to the incumbent's cost to reconstruct the facility.<sup>38</sup> In the case of recycled copper, however, the facilities will lie fallow if not used by competitors. Thus, the goal of the Commission in adopting appropriate pricing rules for recycled copper should be to sufficiently compensate the incumbent while providing incentive to the competitors to transform the existing copper plant into broadband facilities. As such the only costs that the incumbent should be permitted to impose on entrants are averaged costs associated with restoring service and "maintaining" the facilities in working order.<sup>39</sup>

As explained in the ETC Declaration the term "maintenance" is somewhat misleading. The common perception of maintenance is a collection of routine preventive measures adopted to extend a facility's useful life. With respect to copper outside plant, it should be noted, "maintenance" is more akin to "repair," because most maintenance activities involve a response to a specific event (such as storm damage).<sup>40</sup> The incumbent LEC should be permitted compensation for costs legitimately incurred to bring retired copper back into service. In most instances, such activities should be trivial.<sup>41</sup> There are, however, likely to be times when specific copper facilities may have to be repaired (in response to events such as those described in the ETC Declaration). Rather than attempt to track specific repair activities (whether for purposes of restoring or maintaining service ) to particular facilities -- so that these unique costs can be recovered in response to individual requests for service -- COMPTTEL recommends that the Commission adopt pricing rules that would permit an incumbent LEC to charge only a

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<sup>36</sup> As with the Commission's existing UNE pricing rules, however, entrants and incumbents would still have the option of negotiating alternative prices, including the option to apply existing UNE prices to recycled copper.

<sup>37</sup> Gillan Declaration at ¶ 17.

<sup>38</sup> *See id* at ¶ 13.

<sup>39</sup> *Id* at ¶¶ 14-16. The rates for recycled copper are intended to recover the costs expended to extend its life, not replace it de novo as assumed by the Commission's TELRIC rules.

<sup>40</sup> *See* ETC Declaration at ¶¶'s 23 and 29.

<sup>41</sup> *Id* at ¶ 29 - 30.

“restoration fee” that would recover, on average, the costs to bring copper facilities back into service, and a monthly recurring charge limited to the expected costs to repair any active loop averaged over all loops (including loops used by the incumbent to provide retail services).<sup>42</sup>

The Commission’s rules should make clear that no investment cost (*e.g.*, original cost less accumulated depreciation) may be included in charges for recycled copper facilities. As explained in the Gillan Declaration, due to the many years over which these facilities have been depreciated, there is little likelihood of existing book investment for retired copper loop facilities and, to the extent there is, the incumbent LECs have themselves chosen to forgo the recoupment of that investment by retiring the copper.<sup>43</sup> While the incumbent LEC may claim they have the right to seek the salvage value in the copper, their practice thus far provides no indication of such plans and the costs to physically remove the copper plant and transport it to a salvage point most likely more than offsets the copper’s worth.<sup>44</sup>

In conclusion, the legacy copper network is the nation’s most ubiquitous service platform capable of supporting true broadband service offerings. It is imperative that the Commission act expeditiously to preserve this remarkably resilient and useful legacy network plant in furtherance of its objective that all consumers are able to enjoy the benefits of competition and broadband services.

Respectfully Submitted,

/s/

Karen Reidy

cc: Rob Curtis  
Tom Koutsky  
Bryon J. Neal  
David Isenberg  
Rohit Dixit  
Ian Dillner  
Bill Dever  
Rebekah Goodheart

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<sup>42</sup> See Gillan Declaration at ¶ 15 - 16.

<sup>43</sup> *Id* at ¶¶ 18-20.

<sup>44</sup> See ETC Declaration at ¶ 39 [“[T]he labor and construction costs of copper cable removal would, very likely, meet or exceed the original cost of deployment, rendering any salvage value of the copper cable moot.”] Thus, if the Commission adopts pricing rules that would permit the possible inclusion of salvage value in the charges for recycled copper, those rules should require that the value be reduced by an estimate of the costs an incumbent would incur to physically remove the copper plant and transport it to a salvage point.